

2006 State of the Trees Report

Department of Public Works
Division of Urban Forestry



2006 — A Forester's Perspective

As I look back and reflect on 2006 I'm drawing images of a fairly typical year. The storms were not all that severe. We had a lot of service requests, there was little staff turn-over and no major catastrophes occurred. However that is not to say that the year was uneventful! Two more of the Urban Forestry Staff passed the exam to become ISA Certified Arborists. We now have a total of five Certified Arborists on staff. The Best Management Practices Guide for Contractors and Builders was finally printed and distrib-



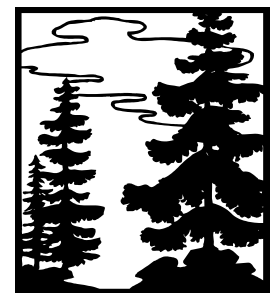
Gene Hyde is the editor of this publication.

uted throughout the construction spectrum with lots of very positive feedback. The large stately elm tree in Coolidge Park was split in a windstorm in August and was too badly damaged to

save. The tree was removed and the wood was salvaged and given away in a lottery which attracted widespread attention in Chattanooga. This event was so successful that more wood lotteries are planned for the future. We also did battle with our old enemy—kudzu—on Missionary Ridge. A battalion of goats was brought in to graze the area and all indications are that they did a stellar job in removing this vexing vine. The City plans for a return engagement with the goats for next summer. The Tree Commission took the lead role in approaching Mayor Littlefield with the request to sign the U.S. Conference of Mayor's Climate Protection Agreement. His commitment obligates the City to reducing carbon dioxide emissions to seven percent below 1990 levels. The challenge now is to make the determination as to where we were in 1990 and how do we achieve these lower levels. The urban forest's ability to sequester carbon should play a significant role in this initiative.

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STRATUM Has Arrived

In March City Forester Gene Hyde learned about a new software program called STRATUM which stands for Street Tree Analysis For Urban Forest Managers. This new software program was developed by the Davey Resource Group and the Forest Service as part of an overall suite of tools called "i-Tree". Their goal was to provide a comprehensive package of software programs to facilitate the inventory and assessment of urban forests and ecosystems in any city, large or small. Since the software programs were

developed partially with taxpayers money the i-Tree CD is free. In July the City was awarded a grant of \$12,000 by the Tennessee Division of Forestry to perform the STRATUM analysis as well as to update the City's computer database of 6,000 existing trees. Hyde hopes that the results of the analysis will be used to provide information necessary to formulate a new management plan as well as provide information on carbon sequestration by city trees for use in the Climate Protection Agreement study. The analysis should be complete by late summer of 2007.

Special Points of interest in 2006:

- Chattanooga was a "Tree City" for the 16th year.
- Arbor Day was held at The Montessori School.
- The backlog of Service Requests is approximately 10.

Tree Planting in 2006

A total of 15 species were planted by in-house and contract crews in 2005. They are:

1. Willow Oak	13 ea.
2. Goldenrain Tree	12 ea.
3. 'Village Green' Zelkova	7 ea.
4. Yoshino Cherry	15 ea.
5. Pin Oak	3 ea.
6. Chinese Pistache	2 ea.
7. 'Tuskegee' Crape Myrtle	13 ea.
8. Flowering Dogwood	1 ea.
9. 'Autumn Gold' Ginkgo	11 ea.
10. Yellowwood	1 ea.
11. Seedless Sweetgum	2 ea.
12. Chinese Elm	6 ea.



13. Kwanzan Cherry	7 ea.
14. 'Aristocrat' Pear	1 ea.
15. 'Hightower' Willow Oak	30 ea.

TOTAL 124

Streetscapes trees were planted as follows:

Cherokee Boulevard

'Happidaze' Sweetgum 33 ea.

Glenwood Neighborhood Project

'Spring Snow' Crabapple 6 ea.

Manchester Park

'Tuskegee' Crape Myrtle 7 ea.

Citico Creek Shade Project

Sycamore, poplar, birch, red maple 32 total

GRAND TOTAL 202

Tree Protection BMP Guides for Contractors and Builders is Now Available

In early 2005 the Tree Commission decided that there were too many trees dying on construction projects. Furthermore they thought that it would be very useful to have written standards to provide to the building industry to guide them in the process of saving trees. City Forester Gene Hyde responded by putting together a pocket sized set of principles known as Best Management Practices or BMPs for short. Most of this work was taken from a body of work from Athens/Clarke County Georgia.



Measuring only 3 1/2 inches wide and 7 inches tall this guide was printed on waterproof paper and was designed to fit into a shirt pocket, pick-up truck console, or above a sun visor. Major sections on Saving trees in existing woodlands, determining the critical root zone, and tree protection help make this publication extremely useful. Other sessions on cutting and filling operations, avoiding catastrophic root failure, and new tree establishment make this a well-rounded booklet. This guide has already been presented to the Associated General Contractors of East Tennessee, The Engineers Club, and the local chapter of the American Institute of Architects and has received widespread acceptance. A total of 1,000 copies were originally printed and are available through the City Forester's office.

Status of Service Requests

Responding to service requests is the single most time consuming and expensive aspect of our urban forestry operations. These requests pour in from a variety of sources including the 311 center, Fire and Police Departments, the Hamilton County Education Department, sister divisions within City Wide Services, and other City departments. In 2005 we switched software programs for tracking work orders. The Tree Manager software program was replaced by City Works which can be used throughout the entire Department of Public Works. In 2006 the 311 Call center records indicate that

we received 1,072 requests as shown below and that we solved all except 10.

	2006	2005	2004
General Tree Problems	34	31	61
Fallen Trees and Branches	499	325	340
Tree Removal	178	170	174
Tree Trimming	<u>361</u>	<u>364</u>	<u>166</u>
Totals	1,072	890	741

The Coolidge Park Elm

In August a strong thunderstorm twisted and split the massive old Coolidge Park Elm. City Forester Gene Hyde closely inspected the tree several days after the storm and made the determination that he could keep the tree alive but could not make it safe. Other consulting arborists agreed and after much deliberation it was decided to remove the tree. This was particularly painful for Hyde who had originally evaluated the tree before the building of Coolidge Park and had recommended that the tree be kept as a desirable feature. As a result the circular walkway which traverses the open field was designed around this tree.

Upon consultation with City Hall a decision was made to salvage as much of the wood as possible. All of the trunk and most of the large branches were saved and later given away to local wood carvers and turners in a special lottery. One small section of wood was given to a local wood carver, Bill Hassel, who will produce a piece that will pay tribute to the venerable old elm. This display is scheduled to be placed in the newly renovated Chattanooga Outventure building.

An oft asked question is what will go back in place of the elm.

Hyde devised a plan to provide for a replacement of the elm and will also honor our existing Sister Cities. The plan is to plant a tree in honor of Chattanooga's five Sister Cities that are broadly indigenous to Hamm, Germany; Wuxi, China; Givatayim, Israel; Nizhnii Tagil, Russia; and Gungneung, Korea. Our Twinning Cities of Swindon, UK, and Ascoli

Piceno, Italy will be similarly honored. In addition, a stone marker in both English and the native language of the country will be installed close to each tree. This grouping will be known as the Peace Grove and will be officially dedicated during a special ceremony next Arbor Day on March 2, 2007.



The large slippery elm in Coolidge Park was a centerpiece.

Photo courtesy of Wesley Schultz

Mayor Littlefield Signs Climate Protection Agreement, Trees can Help!

In the summer of 2006 the Tree Commission unanimously decided that it would be a good idea to approach the mayor and ask him to sign the Conference of Mayor's Climate Protection Agreement based on the following information: The National Science Academies of the United States, England, France, Russia, Germany, Japan, Italy, Canada, Brazil, China, and India issued the following joint declaration in June, 2005: "The Scientific understanding of change is now sufficiently clear to justify nations taking prompt action." The world's leading scientists ask us to "recognize that delayed action will increase the risk of adverse environmental effects and will likely incur a greater cost." [Source: Joint Science Academies' Statement: Global Response to Climate Change." June, 2005] Based on the science of global climate change the Conference of Mayors has begun an initiative aimed to help communities participate in the effort to take positive steps to improve environmental conditions at the local level. The "U.S. Mayors Climate Protection Agreement" initiated by Seattle Mayor Greg Nickels in February, 2005, is gathering support around the country and has earned the backing of the U.S. Conference of Mayors. As of late 2006, more than 200 mayors representing more than 42 million Americans in 38 states have signed on, pledging to reduce CO2 pollution in



their cities by 2012 to 7% below 1990 levels.

In August Mayor Littlefield enthusiastically signed the agreement.

What are the steps to participating?

1. Adopt a resolution or make an executive proclamation that commits to reducing local carbon dioxide emissions that contribute to climate change.
2. Conduct an Emissions Inventory. This information will identify the City's major CO2 sources and will provide a baseline to judge the city's progress towards its goal. Assistance is available through the ICLEI Cities for Climate Protection program.
3. Create an Actions Plan. Formulate a plan to reduce emissions while lowering energy costs for the city that consists of various strategies.
4. Implement and Monitor Progress.

To date items number one has been completed and we are working on number two. There are plans to see this process through all of the above listed steps. The Tree Commission believes that trees can play a role in this process by sequestering carbon dioxide. As part of the process of photosynthesis trees take in carbon dioxide and convert it to wood. To prove this point a recent STRATUM analysis of the city trees in Charlotte, North Carolina revealed that their street trees alone absorb 26,000,000 pounds of carbon dioxide every year. These trees represent approximately one percent of the overall tree canopy in Charlotte. This same STRATUM analysis in Chattanooga will be completed in 2007 and the Tree Commission is eagerly awaiting the results of the study.

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Chattanooga Tree Commission Members:

1. Christine Bock
2. June Coppinger, Chair
3. David Gardner
4. Adele Glascock
5. Karna Levitt
6. Kim McClurkin
7. Leroy Parks

Administrator of Public Works:
Steve Leech

Director of City-Wide Services:
Jim Templeton

The Urban Forestry program functions as a separate operation within City Wide Services. Its mission is to provide the City with a safe and attractive urban forest, and to educate citizens about the benefits and proper care of trees. It is guided by the seven-member Tree Advisory Commission as appointed by the Mayor. The Forestry Division draws on other elements within both Public Works and Parks and Recreation to assist with tree planting, solving service requests, and other missions. The program's main operating budget for FY '05-'06 of \$521,115 is derived strictly from annual appropriations.

This report is prepared annually at the request of the Tree Advisory Commission.

Staff Happenings

During 2006 the Urban Forestry staff remained intact with no personnel changes. However the staff was quite active:

Chuck Ashley, Crew Worker Senior, sent a son off to college at Tennessee State University.

Danny Nelson, Tree Trimmer, was promoted to his new position and passed the Certified Arborist Exam.

Jim Willson, Tree Trimmer, served as a coach in youth athletics.

Wayne Pinkerton, Tree Trimmer, has enjoyed 32 years in the tree care profession and is trying to pass the Certified Arborists exam.

Mike Richie, Crew Supervisor, also passed the Certified Arborist Exam.

Jerry Mauldin, Forestry Supervisor, successfully bagged six deer during the fall hunting season.

Gene Hyde, City Forester, was placed on the Board of the Society of Municipal Arborists and learned to rollerblade.



The Urban Forestry Crew at the end of 2006.

Left to Right:
Jim Willson, Trimmer;
Mike Richie, Crew Supervisor;
Chuck Ashley, Crew Worker;
Danny Nelson, Trimmer;
Gene Hyde, City Forester;
Wayne Pinkerton, Trimmer; and
Jerry Mauldin, Forestry Supervisor.

The Asplundh Contract Crew: Left to Right:
Michael Compton, Trimmer;
Ken Chamberlain, Foreman;
Brian Westbrook, Groundman.

